



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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October 6, 2000

CERTIFIED RETURN RECEIPT
Z 230 748 254

Duane Crutchfield
Ash Grove Cement Company
P.O. Box 51
Nephi, Utah 84648

Re: Review of Revised Notice of Intention to Commence Large Mining Operations, Ash Grove Cement Company, Leamington Mine, M/023/004, Juab County, Utah

Dear Mr. Crutchfield:

The Division has completed a review of your draft revised Notice of Intention to Commence Large Mining Operations for the mine, located in Juab County, Utah, which was received June 29, 2000. After reviewing the information, the Division has the following comments which will need to be addressed before tentative approval may be granted. The comments are listed below under the applicable Minerals Rule heading. Please format your response in a similar fashion. If possible, please provide a response to this review within 60 days.

The Division will suspend further review and processing of the updated Leamington mine plan permit application until your response to this letter is received. If you have any questions in this regard please contact me, Tom Munson, Lynn Kunzler, or Doug Jensen of the Minerals Staff. If you wish to arrange a meeting to sit down and discuss this review, please contact us at your earliest convenience. Thank you for your cooperation in completing this permitting action.

Sincerely,

D. Wayne Hedberg
Permit Supervisor
Minerals Regulatory Program

**REVIEW OF REVISED NOTICE OF INTENTION
TO COMMENCE LARGE MINING OPERATIONS**

**Ash Grove Cement Company
Lemington Mine**

**M/023/004
October 6, 2000**

It should be noted that numbering sequence used in the plan submitted by Ash Grove does not necessarily coincide with DOGM's rule heading. For clarification, heading numbers used in this response are those contained in the submittal.

R647-4-105 - Maps, Drawings & Photographs

105.3.11 Regraded slopes to be left at steeper than 2h:1V

A statement is made that waste rock disposal area slopes will not be resloped. Please provide a justification for not resloping this area. Drawing 105.3.17 indicates that this waste rock disposal area will be reclaimed and reseeded. Please explain this apparent contradiction. (DJ)

105.3.14 Maps identifying surface areas which will be disturbed, but will not be reclaimed.

A. Standing final highwalls. – The Division will allow areas where the limestone bedding forms competent highwalls to remain unreclaimed. See section R647-4-111.7 which discusses of this item. (DJ)

B. All existing ponds. – The Division questions the need for all six of the sediment control ponds to remain unreclaimed. Due to the close proximity of each of these ponds to each other and the fact that an irrigation canal is located within a short distance of these features, the proposed use of all the ponds for stock and wildlife watering areas is questionable. Please provide further justification for not reclaiming at least a portion of these ponds. (DJ)

C. Proposed new pond. – Same comment as B above. (DJ)

D. Surface diversion structures – The necessity of reclaiming these features will depend on comment B. If the ponds are eliminated, the diversion structures related to these ponds will also need to be reclaimed. Please itemize the acreage involved with each of these diversion features? (DJ)

E. Road leading north from highway – This road is not designated on any map. No description of the road is provided (i.e., length, width, acreage). Please identify this road on a map and provide this information. (DJ)

F. Road leading south from highway – This road is not designated on any map. No description of the road is provided (i.e., length, width, acreage). Please identify this road on a map and provide this information. (DJ)

105.3.17 Reclamation activities and treatment map

The area of the waste rock disposal area is cross-hatched; however, the legend contains no explanation of this marking, please explain. (DJ)

Rule R647-4-111.9 Dams and Impoundments

A request to leave six ponds is not acceptable without further justification of why this is necessary from a post mining land use perspective. Only marginal supporting calculations and drawings have been provided to size existing ponds and conveyance systems and no designs are provided showing how ponds will be left self-draining and mechanically stable. Therefore, **this variance is denied at this time.** (TM)

R647-4-111.7 Highwalls

The previously approved variance allowing highwalls to be left in the limestone beds at angles steeper than 45 degrees, was for areas mined or to be mined by Ash Grove at the time of the original permit approval.

A request for a highwall variance will be allowed for the 2v:1h (63 degree) southeast highwall which occurs in L3 and L4 limestone horizons except for pit end-walls. This variance will only be allowed if the requested slope angle can be proven as stable.

The Division will allow a variance where the limestone bedding forms the highwall, providing that further studies of the joint orientations in this area confirm the stability of this proposed slope angle. Slope angle modifications may be necessary if further study indicates that joint and fracture configuration of the limestone will not form a stable highwall at a 63 degree angle. The contained report labeled "Highwall Slope Stability Study" by Dr. Segmiller, proposed further study of the limestone horizon before the final highwall slope was made. Ash Grove should investigate a smooth wall drilling procedure, a blasting critique and other procedures outlined in the stability improvement portion noted in the stability study contained with this notice. The area ~~covered~~ being considered for the variance would be the southeast highwall.

The stability study states the bedding plane of the formations in this area strike N36 to N45 degrees east and dip 87 to 90 degrees west. While this slope configuration coincides with the slope and angle of the southeast highwall, the slope dips into the pit on the northwest highwall. Because bedding planes on the northwest wall will be dipping into the pit not forming the wall, a variance for a highwall of 63 degree slopes will also require documentation of further study which supports stability of this high angle slope before a decision can be made.

In the Central pit, the bottom 120 foot portion of a 360 foot highwall of the northeast pit highwall is in the S2 shale horizon. Have engineering analyses been performed to assure the stability of this highwall feature? (DJ)

R647-4-113 - Surety

The appropriate changes or updates to the surety estimate must be made to reflect any changes incorporated from this review. (TM)

R647-4-115 - Confidential Information

Confidential information contained in this document has been noted and will not become a part of the public portion of this document. (DJ)